



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
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July 17, 2009

Ref: ENF-L

CERTIFIED MAIL: RETURN RECEIPT REQUESTED

United Park City Mines c/o Kevin R. Murray, Esq. Chapman and Cutler 201 South Main Street Salt Lake City, UT 84111

Re: Lower Silver Creek, Operable Unit #2
Richardson Flat Tailings Superfund Site, Park City, Utah
Draft Administrative Order on Consent and Statement of Work

Dear Kevin:

Thank you for all of your help with respect to the above referenced Site and for communicating the willingness of United Park City Mines (UPCM) to enter into discussions regarding the conduct of a Remedial Investigation/Feasibility Study (RI/FS). EPA has prepared and enclosed for your review a draft Administrative Settlement Agreement and Order on Consent (AOC). Please also find enclosed the AOC's accompanying Statement of Work (SOW).

As we have discussed together, both of these documents are based upon Agency model language for RI/FS response actions. Although EPA is in receipt the prior Order that UPCM provided in an effort to facilitate the drafting of this AOC, it is necessary that the team utilize model and guidance provisions. The team appreciates your willingness to review these documents and is looking forward to working with you on this project. In furtherance of this goal, EPA requests that UPCM submit a "good faith offer" response to the enclosed AOC and attached SOW within thirty (30) days of receipt of this letter. A "good faith offer" to conduct or finance this action is a written proposal which demonstrates a willingness to perform the outlined work activities and includes the following elements:

A statement of willingness and financial ability to implement the activities outlined in the Statement of Work;

Acceptance of, or a detailed response to, the Statement of Work;

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United Park City Mines
c/o Kevin R. Murray, Esq.

Chapman and Cutler
201 South Main Street
Salt Lake City, UT 84111

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See Reverse for Instructions



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A statement of willingness and financial ability to implement the activities outlined in the Statement of Work:

Acceptance of, or a detailed response to, the Statement of Work;

A statement of willingness to reimburse EPA for past costs, as well as for costs EPA will incur in overseeing implementation of the work; and

A detailed paragraph-by-paragraph response to the proposed AOC (if your offer contemplates modifications to the AOC, if at all possible please make revisions or edits to the AOC electronically and submit a version showing any modifications to it).

Of final note, the enclosed AOC references institutional controls and provides for a related attachment, "Appendix C," entitled "Draft Easement." Given the early juncture of this response action, we have included the model's institutional controls provisions as a placeholder to discuss once more a more complete technical assessment is available. Likewise, rather than including an easement at this juncture, the team would like to work with you to incorporate such as the investigation and response action proceeds.

The Site team appreciates all the efforts that you and your client have made and we are looking forward to our discussions. If you have any questions about the AOC, please feel free to contact me at (303) 312-6554. Please direct any concerns regarding the SOW to Kathy Hernandez at (303) 312-6101. Thank you for your attention to this matter.

Sincerely,

Mia Bearley,

Legal Enforcement Program

Enclosures

cc:

M. Bearley ENF-L (w/encl)
M. O'Reilly, ENF-RC (w/encl)
K. Hernandez, EPR-SR (letter only)
Kerry Gee (w/encl)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

IN THE MATTER OF: Lower Silver Creek, Operable Unit 2, Richardson Flat Tailings Site Park City, Utah	 ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY
United Park City Mines Company, Respondent)))
Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622.	U.S. EPA Region VIII CERCLA Docket No))

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ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY

Lower Silver Creek, Richardson Flat Site, Operable Unit No. 2

I. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and United Park City Mines Company, ("Respondent"). The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study ("RI/FS") for the Lower Silver Creek Site, Operable Unit 2 of the Richardson Flat Tailings Site, located near Park City, Utah ("Site") and the reimbursement for future response costs incurred by EPA in connection with the RI/FS, as well as Past Response Costs.
- 2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on May 11, 1994, by EPA Delegation Nos. 14-14-C and 14-14-D. This authority was further redelegated by the Regional Administrator of EPA Region 8 to the Assistant Regional Administrator, Office of Ecosystem Protection and Remediation by EPA Delegation No. 14-14-C.
- 3. In accordance with Sections 104(b)(2) and 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), EPA notified the United States Department of the Interior and the Utah Department of Environmental Quality on November 19, 1999, of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal and State trusteeship. Subsequent notice regarding Operable Unit 2 of the Richardson Flat Tailings Site was given to these parties on June 24, 2009.
- 4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact, conclusions of law and determinations in Sections V and VI of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

- 5. This Settlement Agreement applies to and is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement Agreement.
- 6. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.
- 7. The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind Respondent to this Settlement Agreement.

III. STATEMENT OF PURPOSE

- 8. In entering into this Settlement Agreement, the objectives of EPA and Respondent are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site, by conducting a Remedial Investigation as more specifically set forth in the Statement of Work ("SOW") attached as Appendix A to this Settlement Agreement; (b) to identify and evaluate remedial alternatives to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study as more specifically set forth in the SOW in Appendix A to this Settlement Agreement; and (c) to recover response and oversight costs incurred by EPA with respect to this Settlement Agreement, as well as Past Response Costs.
- 9. The Work conducted under this Settlement Agreement is subject to approval by EPA and shall provide all appropriate and necessary information to assess Site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondent shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, and all applicable EPA guidances, policies, and procedures.

IV. DEFINITIONS

10. Unless otherwise expressly provided herein, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever

terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

- a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, et seq.
- b. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.
- c. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXIX.
- d. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
- e. "Engineering Controls" shall mean constructed containment barriers or systems that control one or more of the following: downward migration, infiltration or seepage of surface runoff or rain; or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.
- f. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, Agency for Toxic Substances and Disease Registry ("ATSDR") costs, the costs incurred pursuant to Paragraph 54 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation) and Paragraph 40 (emergency response), and Paragraph 87 (Work takeover). Future Response Costs shall also include all Interim Response Costs, and all Interest on those Past Response Costs Respondent have agreed to reimburse under this Settlement Agreement that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from December 31, 2008 to the Effective Date of this Settlement Agreement.
- g. "Institutional controls" shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements, and well drilling prohibitions.
- h. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually, in accordance with 42 U.S.C. § 9607(a). The applicable

rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

- i. "Interim Response Costs" shall mean all costs, including direct and indirect costs, (a) paid by the United States in connection with the Site between December 31, 2008 and the Effective Date, or (b) incurred prior to the Effective Date, but paid after that date.
- j. "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.
- k. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral. References to paragraphs in the SOW will be so identified (for example, "SOW paragraph 15").
 - 1. "Parties" shall mean EPA and Respondent.
- m. "Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through December 31, 2008, plus Interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through such date.
- n. "RCRA" shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, et seq.
 - o. "Respondent" shall mean United Park City Mines Company.
- p. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral. References to sections in the SOW will be so identified; for example as "SOW Section V."
- q. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent, the SOW, all appendices attached hereto (listed in Section XXVII) and all documents incorporated by reference into this document including without limitation EPA-approved submissions. EPA-approved submissions (other than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by EPA. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Settlement Agreement shall control.
- r. "Site" shall mean the Lower Silver Creek Site, Operable Unit 2 of the Richardson Flats Tailings Superfund Site, encompassing approximately 1,875 acres in Park City, Summit County, Utah, and depicted generally on the map attached as Appendix B. Lower Silver Creek is situated east of Highway 40, bounded by Highway 248 on its southern end and Interstate 80 to the north. It is located in Township 1 South

Range 4 East, in Sections 10, 11, 15, 14, 22, 23, 27, 26, and 35, with approximately 500 feet occurring in Section 2 of Township 2 South Range 4 East. The LSC Site ranges in width from 2,100 feet at the southern boundary to 3,800 feet near Pivotal Promontory Road. The Site is located in Summit County, Utah.

- s. "State" shall mean the State of Utah.
- t. "Statement of Work" or "SOW" shall mean the Statement of Work for development of a RI/FS for the Site, as set forth in Appendix A to this Settlement Agreement. The Statement of Work is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement.
- u. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).
- v. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement, except those required by Section XIV (Retention of Records).

V. FINDINGS OF FACT

- 11. The Lower Silver Creek Site ("Site"), which is Operable Unit 2 of the Richardson Flat Tailings Site, is located two miles east of Park City, in Summit County, Utah. The Site is part of the Silver Creek Watershed, a term used to describe an area impacted by historic mining of lead, zinc, gold, silver, and copper. Mining operations proximate to Park City and in the Silver Creek Watershed were prolific and produced approximately 16 million tons of ore between 1875 and 1967. The Site extends over 12 miles along the banks of Silver Creek from State Route 248 on the southern end of the Site downstream to Interstate 80 on the northern end of the Site.
- 12. Site soil samples indicate high concentrations of lead (26,200 mg/kg), arsenic (745 mg/kg), zinc (18,700 mg/kg) and cadmium (119 mg/kg). Surface water contains elevated levels of cadmium (47.5 ug/l), lead (40 ug/l) and zinc (9,310 ug/l). EPA estimates that there are 1,479,000 cubic yards of mining waste, extending over 400 acres along the flood plain of the Silver Creek, including wetlands. The primary land use on the Site is commercial livestock grazing, however, the Site also hosts recreational use. A former rail line has been converted into a recreational trail and is now used extensively for hiking, observing wildlife, and accessing Silver Creek for fishing. In addition, the Summit County Fire House is located within the Site and is regularly occupied. The area surrounding the Site is being developed with commercial businesses to the west and a residential community to the east. The Echo Reservoir, a source of drinking water, is located 12.5 miles downstream of the Site.

- 13. Respondent came to own and operate mines and mills, such as the Ontario and Daly West Mines, and the Grasselli and Beggs Mills, within the Silver Creek Watershed in the late 1800s and early 1900s. Over the course of time, these mining operations resulted in fluvial transport of tailings and mining waste downstream to the Site.
- 14. Approximately 7 million tons of tailings are located at Operable Unit 1 of the Richardson Flat Tailings Site ("OU1"), which is directly upgradient and contiguous to the Site, OU2. Historically, hazardous substances associated with mining waste were fluvially transported from OU1 to OU2. Respondent has conducted operations, continues to own, and is in the process of implementing remedial actions at OU1.
- 15. Within the Site boundary there are two primary tailings deposit areas of concern, the Atkinson Tailing Deposit and the Big Four Exploration Company Tailing Deposit. On-Site contamination is also due to the historic on-Site operation of the Big Four Mill, which reprocessed tailings washed down from the upper Silver Creek watershed.
- 16. Observed contaminant release has been documented through chemical analysis. Hazardous substances attributable to the Site were detected at concentrations greater than three times the upstream and benchmark concentrations.
- 17. The entire portion of the Lower Silver Creek that flows through the Site (approximately 4.5 miles of stream reach) is bordered by wetlands. The surface water samples indicate that cadmium, lead and zinc concentrations exceed water quality standards for protection of aquatic life. A drinking water supply intake is located within 12.5 miles of the Site. The soils exposure pathway for lead, arsenic and cadmium impacts a terrestrial sensitive environment (wetlands), commercial livestock grazing and production, and recreational users, including those using an equestrian center adjacent to the Site and a nearby golf course. This same pathway exists for people working at a local County Fire Station, County Sheriff facility, and a nearby water treatment plant and cement plant. Further, exposed tailings material in the northern portion of the Site presents the potential for airborne migration of contaminants such as lead and arsenic.
- 18. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Lead is persistent in the environment and accumulates in soils and sediments. Ecosystems near sources of lead demonstrate a wide range of adverse effects including loss of biodiversity, changes in community composition, decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates. Cadmium and its compounds are extremely toxic even in low concentrations, and will bioaccumulate in organisms and ecosystems.
- 19. The Site, Operable Unit 2 of the Richardson Flat Tailings Site, is not proposed for listing on the National Priorities List. Operable Unit 1 of the Richardson Flat Tailings Site, which is directly upgradient and contiguous to the Site, was proposed for inclusion

on the National Priorities List ("NPL") pursuant to CERCLA Section 105, 42 U.S.C. § 9605, on September 24, 2002, but has never been listed.

20. Respondent, United Park City Mines Company, is a corporation doing business in the State of Utah and incorporated in the State of Delaware on May 8, 1953. Respondent is a responsible party under CERCLA Section 107(a) in connection with the Site as an owner or operator of a facility.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, EPA has determined that:

- 21. The Lower Silver Creek Site, Operable Unit 2 of the Richardson Flat Tailings Site, is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- 22. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- 23. The conditions described in the Findings of Fact above constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- 24. Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- 25. Respondent is a responsible party under Sections 104, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622.
- a. Respondent is a person who either generated the hazardous substances found at the Site, is a person who at the time of disposal of any hazardous substances owned or operated the Site, or is a person who arranged for disposal or transport for disposal of hazardous substances at the Site. Respondent therefore may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).
- b. Respondent arranged for the disposal of hazardous substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).
- 26. The actions required by this Settlement Agreement are necessary to protect the public health, welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).
- 27. EPA has determined that Respondent is qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of

CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondent comply with the terms of this Settlement Agreement.

VII. SETTLEMENT AGREEMENT AND ORDER

28. Based upon the foregoing Findings of Fact and Conclusions of Law and Determinations, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

- 29. Selection of Contractors, Personnel. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Within 30 days after the Effective Date of this Settlement Agreement, and before the Work outlined below begins, Respondent shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out such Work. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995, or most recent version), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001 or subsequently issued guidance) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Respondent's demonstration to EPA's satisfaction that Respondent is qualified to perform properly and promptly the actions set forth in this Settlement Agreement. If EPA disapproves in writing of any person's technical qualifications, Respondent shall notify EPA of the identity and qualifications of the replacements within 30 days of the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondent. During the course of the RI/FS, Respondent shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing its names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.
- 30. Within 30 days after the Effective Date, Respondent shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondent required by this Settlement Agreement and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent

possible, the Project Coordinator shall be present on Site or readily available during Site Work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within 15 days following EPA's disapproval. Respondent shall have the right to change its Project Coordinator, subject to EPA's right to disapprove. Respondent shall notify EPA 30 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondent.

31. EPA has designated Kathryn Hernandez of EPA's Ecosystems Protection and Remediation Office, Region 8, as its Project Coordinator. EPA will notify Respondent of a change of its designated Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the Project Coordinator at:

Kathyrn Hernandez Remedial Project Manager Superfund Remedial Section, 8EPR-RA US EPA, Region VIII, 1595 Wynkoop Street Denver, Colorado 80202

- 32. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and On-Scene Coordinator ("OSC") by the NCP. In addition, EPA's Project Coordinator shall have the authority consistent with the NCP, to halt any Work required by this Settlement Agreement, and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA Project Coordinator from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.
- 33. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. Section 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify the RI/FS Work Plan.

IX. WORK TO BE PERFORMED

34. <u>Activities and Deliverables</u>. Respondent shall conduct activities and submit plans, reports or other deliverables as provided by the attached SOW, which is incorporated by reference, for the development of the RI/FS. All such Work shall be conducted in accordance with the provisions of this Settlement Agreement, the SOW, CERCLA, the NCP and EPA guidance, including, but not limited to, the "Interim Final

Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive # 9355.3-01, October 1988 or subsequently issued guidance), "Guidance for Data Useability in Risk Assessment" (OSWER Directive #9285.7-05, October 1990 or subsequently issued guidance), and guidance referenced therein, and guidances referenced in the SOW, as may be amended or modified by EPA. The general activities that Respondent is required to perform are identified below, followed by a list of plans, reports and other deliverables. The tasks that Respondent must perform are described more fully in the SOW and guidances. The activities, plans, reports and other deliverables identified below shall be developed as provided in the RI/FS Work Plan and Sampling and Analysis Plan, and shall be submitted to EPA as provided. All Work performed under this Settlement Agreement shall be in accordance with the schedules herein or established in the SOW, and in full accordance with the standards, specifications, and other requirements of the RI/FS Work Plan and Sampling and Analysis Plan, as initially approved or modified by EPA, and as may be amended or modified by EPA from time to time. In accordance with the schedules established in this Settlement Agreement or in the SOW, Respondent shall submit to EPA 3 copies of all plans, reports and other deliverables required under this Settlement Agreement, the SOW and the RI/FS Work Plan. All plans, reports and other deliverables will be reviewed and approved by EPA pursuant to Section X (EPA Approval of Plans and Other Submissions). Upon EPA's request, Respondent shall also provide copies of plans, reports or other deliverables to Community Advisory Groups, Technical Assistance Grant recipients or any other entities as directed by EPA. Upon request by EPA, Respondent shall submit in electronic form all portions of any plan, report or other deliverable Respondent are required to submit pursuant to provisions of this Settlement Agreement.

- a. <u>Scoping</u>. EPA will determine the Site-specific objectives of the RI/FS and devise a general management approach for the Site, as stated in the attached SOW. Respondent shall conduct the remainder of scoping activities as described in the attached SOW and referenced guidances. At the conclusion of the project planning phase, Respondent shall provide EPA with the following plans, reports and other deliverables:
- (1) <u>RI/FS Work Plan</u>. Within 30 days prior to planned date, as set in writing by EPA, for start of field work Respondent shall submit to EPA a complete RI/FS Work Plan. Upon its approval by EPA pursuant to Section X (EPA Approval of Plans and Other Submissions), the RI/FS Work Plan shall be incorporated into and become enforceable under this Settlement Agreement.
- (2) <u>Sampling and Analysis Plan</u>. Within 30 days prior to planned date, as set in writing by EPA, for start of field work Respondent shall submit a Sampling and Analysis Plan to EPA for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions). This plan shall consist of a Field Sampling Plan ("FSP") and a Quality Assurance Project Plan ("QAPP"), as described in the Statement of Work and guidances, including, without limitation, "EPA Guidance for Quality Assurance Project Plans (QA/G-5)"(EPA/600/R-02/009, December 2002 or subsequently issued guidance), and "EPA Requirements for Quality Assurance Project Plans (QA/R-

- 5)" (EPA 240/B-01/003, March 2001 or subsequently issued guidance). Upon its approval by EPA pursuant to Section X (EPA Approval of Plans and Other Submissions), the Sampling and Analysis Plan shall be incorporated into and become enforceable under this Settlement Agreement.
- (3) Site Health and Safety Plan. Within 30 days prior to planned date, as set in writing by EPA, for start of field work Respondent shall submit for EPA review and comment a Site Health and Safety Plan that ensures the protection of on-site workers and the public during performance of on-site Work under this Settlement Agreement. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992 or subsequently issued guidance). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the RI/FS.
- b. <u>Community Relations Plan</u>. EPA will prepare a community relations plan, in accordance with EPA guidance and the NCP. As requested by EPA, Respondent shall provide information supporting EPA's community relations plan and shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or concerning the Site.
- c. <u>Site Characterization</u>. Following EPA approval or modification of the RI/FS Work Plan and Sampling and Analysis Plan, Respondent shall implement the provisions of these plans to characterize the Site. Respondent shall complete Site characterization and submit all plans, reports and other deliverables in accordance with the schedules and deadlines established in this Settlement Agreement, the SOW, and/or the EPA-approved RI/FS Work Plan and Sampling and Analysis Plan.
- d. Reuse Assessment. If EPA, in its sole discretion, determines that a Reuse Assessment is necessary, Respondent will perform the Reuse Assessment in accordance with the SOW, RI/FS Workplan and applicable guidance. The Reuse Assessment should provide sufficient information to develop realistic assumptions of the reasonably anticipated future uses for the Site. Respondent shall prepare the Reuse Assessment in accordance with EPA guidance, including, but not limited to: "Reuse Assessments: A Tool To Implement The Superfund Land Use Directive," OSWER Directive 9355.7-06P, June 4, 2001 or subsequently issued guidance.
- e. <u>Baseline Human Health Risk Assessment and Ecological Risk Assessment.</u> Respondent will perform the Baseline Human Health Risk Assessment and Ecological Risk Assessment ("Risk Assessments") in accordance with the SOW, RI/FS Work Plan and applicable EPA guidance, including but not limited to: "Interim Final Risk Assessment Guidance for Superfund, Volume I Human Health Evaluation Manual (Part A)," (RAGS, EPA-540-1-89-002, OSWER Directive 9285.7-01A, December 1989);

"Interim Final Risk Assessment Guidance for Superfund, Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments)," (RAGS, EPA 540-R-97-033, OSWER Directive 9285.7-01D, January 1998); "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments" (ERAGS, EPA-540-R-97-006, OSWER Directive 9285.7-25, June 1997) or subsequently issued guidance.

- f. <u>Draft Remedial Investigation Report</u>. Within 30 days after EPA's approval of the Risk Assessments, Respondent shall submit to EPA for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions), a Draft Remedial Investigation Report consistent with the SOW, RI/FS Work Plan, Sampling and Analysis Plan. The Draft RI Report shall also contain the Risk Assessments.
- g. <u>Treatability Studies</u>. Respondent shall conduct treatability studies, except where Respondent can demonstrate to EPA's satisfaction that they are not needed. The major components of the treatability studies are described in the SOW. In accordance with the schedules or deadlines established in this Settlement Agreement, the SOW and/or the EPA-approved RI/FS Work Plan, Respondent shall provide EPA with the following plans, reports, and other deliverables for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions):
- (1) Identification of Candidate Technologies Memorandum. This memorandum shall be submitted as specified by EPA.
- (2) Treatability Testing Statement of Work. If EPA determines that treatability testing is required, as specified by EPA, Respondent shall submit a Treatability Testing Statement of Work ("TTSOW").
- (3) Treatability Testing Work Plan. Within 30 days after submission of the TTSOW, Respondent shall submit a Treatability Testing Work Plan, including a schedule.
- (4) Treatability Study Sampling and Analysis Plan. Within 30 days after identification of the need for a separate or revised QAPP or FSP, Respondent shall submit a Treatability Study Sampling and Analysis Plan.
- (5) Treatability Study Site Health and Safety Plan. Within 30 days after the identification of the need for a revised Health and Safety Plan, Respondent shall submit a Treatability Study Site Health and Safety Plan.
- (6) Treatability Study Evaluation Report. Within 30 days after completion of any treatability testing, Respondent shall submit a treatability study evaluation report as provided in the Statement of Work and Work Plan.
- h. <u>Development and Screening of Alternatives</u>. Respondent shall develop an appropriate range of waste management options that will be evaluated through

the development and screening of alternatives, as provided in the SOW and RI/FS Work Plan. In accordance with the schedules or deadlines established in this Settlement Agreement, the SOW and/or the EPA-approved RI/FS Work Plan, Respondent shall provide EPA with the following deliverables for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions):

- (1) Memorandum on Remedial Action Objectives. The Memorandum on Remedial Action Objectives shall include remedial action objectives for Engineering Controls as well as for Institutional Controls.
- (2) Memorandum on Development and Screening of Alternatives. The Memorandum shall summarize the development and screening of remedial alternatives.
- i. <u>Detailed Analysis of Alternatives</u>. Respondent shall conduct a detailed analysis of remedial alternatives, as described in the SOW and RI/FS Work Plan. In accordance with the deadlines or schedules established in this Settlement Agreement, the SOW and/or the EPA-approved RI/FS Work Plan Respondent shall provide EPA with the following deliverables and presentation for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions):
- (1) Report on Comparative Analysis and Presentation to EPA. Within 60 days after receiving final remedial action objectives from EPA, Respondent will submit a report on comparative analysis to EPA. Within 45 days of submitting the report on comparative analysis, Respondent will present to EPA a summary of the findings of the remedial investigation and remedial action objectives, and present the results of the nine criteria evaluation and comparative analysis, as described in the SOW.
- (2) Alternatives Analysis for Institutional Controls and Screening. Respondent shall submit a memorandum on the Institutional Controls identified in the Memorandum on Development and Screening of Alternatives as potential remedial actions. The Alternatives Analysis for Institutional Controls and Screening shall (1) state the objectives (i.e., what will be accomplished) for the Institutional Controls; (2) determine the specific types of Institutional Controls that can be used to meet the remedial action objectives; (3) investigate when the Institutional Controls need to be implemented and/or secured and how long they must be in place; (4) research, discuss and document any agreement with the proper entities (e.g., state, local government entities, local landowners, conservation organizations, Respondent) on exactly who will be responsible for securing, maintaining and enforcing the Institutional Controls. The Alternatives Analysis for Institutional Controls and Screening shall also evaluate the Institutional Controls identified in the Memorandum on Development and Screening of Alternatives against the nine evaluation criteria outlined in the NCP (40 C.F.R. 300.430(e)(9)(iii)) for CERCLA cleanups, including but not limited to costs to implement, monitor and/or enforce the Institutional Controls. The Alternatives Analysis for Institutional Controls and Screening shall be submitted as an appendix to the Draft Feasibility Study Report.

- (3) Draft Feasibility Study Report. Within 30 days after the presentation to EPA described in Paragraph 34(i)(1), Respondent shall submit to EPA a Draft Feasibility Study Report which reflects the findings in the Risk Assessments. Respondent shall refer to Table 6-5 of the RI/FS Guidance for report content and format. The report as amended, and the administrative record, shall provide the basis for the proposed plan under CERCLA Sections 113(k) and 117(a) by EPA, and shall document the development and analysis of remedial alternatives.
- 35. Upon receipt of the draft FS report, EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the durability, reliability and effectiveness of any proposed Institutional Controls.

36. Modification of the RI/FS Work Plan.

- a. If at any time during the RI/FS process, Respondent identifies a need for additional data, Respondent shall submit a memorandum documenting the need for additional data to the EPA Project Coordinator within 30 days of identification. EPA in its discretion will determine whether the additional data will be collected by Respondent and whether it will be incorporated into plans, reports and other deliverables.
- b. In the event of unanticipated or changed circumstances at the Site, Respondent shall notify the EPA Project Coordinator by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the RI/FS Work Plan, EPA shall modify or amend the RI/FS Work Plan in writing accordingly. Respondent shall perform the RI/FS Work Plan as modified or amended.
- c. EPA may determine that in addition to tasks defined in the initially approved RI/FS Work Plan, other additional Work may be necessary to accomplish the objectives of the RI/FS. Respondent agree to perform these response actions in addition to those required by the initially approved RI/FS Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a complete RI/FS.
- d. Respondent shall confirm its willingness to perform the additional Work in writing to EPA within 7 days of receipt of the EPA request. If Respondent objects to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). The SOW and/or RI/FS Work Plan shall be modified in accordance with the final resolution of the dispute.
- e. Respondent shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Work Plan or written RI/FS Work Plan supplement. EPA

reserves the right to conduct the Work itself at any point, to seek reimbursement from Respondent, and/or to seek any other appropriate relief.

- f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.
- 37. Off-Site Shipment of Waste Material. Respondent shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to EPA's Designated Project Coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.
- a. Respondent shall include in the written notification the following information: (1) the name and location of the facility to which the Waste Material is to be shipped: (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.
- b. The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the remedial investigation and feasibility study. Respondent shall provide the information required by Subparagraph 37.a and 37.c as soon as practicable after the award of the contract and before the Waste Material is actually shipped.
- c. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondent shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.
- 38. Meetings. Respondent shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.
- 39. <u>Progress Reports</u>. In addition to the plans, reports and other deliverables set forth in this Settlement Agreement, Respondent shall provide to EPA monthly progress reports by the 15th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall (1) describe the actions which have been taken to comply with this Settlement Agreement during that month, (2) include all results of sampling and tests and all other data received by Respondent, (3) describe Work

planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

40. Emergency Response and Notification of Releases.

- a. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in Settlement Agreement to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the EPA Project Coordinator or, in the event of his/her unavailability, an On Scene Coordinator ("OSC") or Curtis Kimbel, Emergency Response Unit, EPA Region 8 Preparedness, Assessment and Emergency Response Program, at 303-312-6108, and the Region 8 Emergency Response Spill Report Hotline, at 1-800-227-8914 of the incident or Site conditions. In the event that Respondent fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs).
- b. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the EPA Project Coordinator, an OSC or the Regional Duty Officer at Region 8 Emergency Response Spill Report Hotline, at 1-800-227-8914 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, et seq.

X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

41. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Settlement Agreement, in a notice to Respondent EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Respondent at least one notice of deficiency and an opportunity to cure within 30 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

42. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Subparagraph 41(a), (b), (c) or (e), Respondent shall proceed to take any action required by the plan, report or other deliverable, as approved or modified by EPA subject only to its right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, Respondent shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Subparagraph 41(c) and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

43. Resubmission.

- a. Upon receipt of a notice of disapproval, Respondent shall, within 15 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI, shall accrue during the 15-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 44 and 45.
- b. Notwithstanding the receipt of a notice of disapproval, Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for stipulated penalties under Section XVI (Stipulated Penalties).
- c. Respondent shall not proceed further with any subsequent activities or tasks until receiving EPA approval, approval on condition or modification of the following deliverables: RI/FS Work Plan and Sampling and Analysis Plan, Draft Remedial Investigation Report and Treatability Testing Work Plan and Sampling and Analysis Plan and Draft Feasibility Study Report. While awaiting EPA approval, approval on condition or modification of these deliverables, Respondent shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement Agreement.
- d. For all remaining deliverables not listed above in subparagraph 43.c., Respondent shall proceed will all subsequent tasks, activities and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.
- 44. If EPA disapproves a resubmitted plan, report or other deliverable, or portion thereof, EPA may again direct Respondent to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report or other deliverable. Respondent shall implement any such plan, report, or deliverable as corrected, modified or developed

by EPA, subject only to Respondent's right to invoke the procedures set forth in Section XV (Dispute Resolution).

- 45. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superceded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified or superceded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.
- 46. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondent shall incorporate and integrate information supplied by EPA into the final reports.
- 47. All plans, reports, and other deliverables submitted to EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.
- 48. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Respondent's deliverables, Respondent is responsible for preparing deliverables acceptable to EPA.

XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

49. Quality Assurance. Respondent shall assure that Work performed, samples taken and analyses conducted conform to the requirements of the SOW, the QAPP and guidances identified therein. Respondent will assure that field personnel used by Respondent are properly trained in the use of field equipment and in chain of custody procedures. Respondent shall only use laboratories which have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

50. Sampling.

- a. All results of sampling, tests, modeling or other data (including raw data) generated by Respondent, or on Respondent' behalf, during the period that this Settlement Agreement is effective, shall be submitted to EPA in the next monthly progress report as described in Paragraph 39 of this Settlement Agreement. EPA will make available to Respondent validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.
- b. Respondent shall verbally notify EPA at least 30 days prior to conducting significant field events as described in the SOW, RI/FS Work Plan or Sampling and Analysis Plan. At EPA's verbal or written request, or the request of EPA's oversight assistant, Respondent shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) of any samples collected in implementing this Settlement Agreement. All split samples of Respondent shall be analyzed by the methods identified in the QAPP.

51. Access to Information.

- a. Respondent shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.
- b. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when it is submitted to EPA, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent. Respondent shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which Respondent assert business confidentiality claims.
- c. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: 1) the title of the document, record,

or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

- d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.
- 52. In entering into this Settlement Agreement, Respondent waives any objections to any data gathered, generated, or evaluated by EPA, the State or Respondent in the performance or oversight of the Work that has been verified according to the quality assurance/quality control ("QA/QC") procedures required by the Settlement Agreement or any EPA-approved RI/FS Work Plans or Sampling and Analysis Plans. If Respondent objects to any other data relating to the RI/FS, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days of the monthly progress report containing the data.

XII. SITE ACCESS AND INSTITUTIONAL CONTROLS

53. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within 30 days after the Effective Date, or as otherwise specified in writing by the EPA Project Coordinator. Respondent shall immediately notify EPA if after using its best efforts they are unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Respondent shall describe in writing its efforts to obtain access. If Respondent cannot obtain access agreements, EPA may either (i) obtain access for Respondent or assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein. using such means as EPA deems appropriate; (ii) perform those tasks or activities with EPA contractors; or (iii) terminate the Settlement Agreement. Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs). If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondent shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all costs incurred in performing such tasks or activities. Respondent shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports and other deliverables.

- 54. If the Site, or any other property where access and/or land/water use restrictions are needed to implement this Settlement Agreement, is owned or controlled by persons other than Respondent, Respondent shall use best efforts to secure from such persons the following, which also would, as a threshold, be required to satisfy reasonable steps pursuant to 42 U.S.C. § 9601(40):
- a. an agreement to provide access thereto for Respondent, as well as for the United States on behalf of EPA, and the State, as well as their representatives (including contractors), for the purpose of conducting any activity related to this Settlement Agreement including, but not limited to:
 - (1) Monitoring the Work;
- (2) Verifying any data or information submitted to the United States or the State;
 - (3) Conducting investigations relating to contamination at or near the Site;
 - (4) Obtaining samples;
- (5) Assessing the need for, planning, or implementing additional response actions at or near the Site;
- (6) Assessing implementation of quality assurance and quality control practices as defined in the approved Quality Assurance Project Plans;
 - (7) Implementing the Work pursuant to this Settlement Agreement;
- (8) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondent or its agents, consistent with Section XI (Access to Information);
- (9) Assessing Respondent's compliance with this Settlement Agreement; and
- (10) Determining whether the Site or other property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, by or pursuant to this Settlement Agreement.
- b. an agreement, enforceable by Respondent and the United States, to refrain from using the Site, or such other property, in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the remedial measures to be performed pursuant to this Settlement Agreement. Such restrictions include, but are not limited to [list specific restrictions]; and
- c. the execution and recordation in the Recorder's Office of Summit County, State of Utah, pursuant to Utah Code Ann. §§ 57-25-101 et seq., of an easement, running with the land, that (i) grants a right of access for the purpose of conducting any activity related to this Settlement Agreement including, but not limited to, those activities listed in this Paragraph 54.a of this Settlement Agreement, and (ii) grants the right to enforce the land/water use restrictions listed in this Paragraph 54.b of this Settlement Agreement, or other restrictions that EPA determines are necessary to implement, ensure non-

interference with, or ensure the protectiveness of the remedial measures to be performed pursuant to this Settlement Agreement. The access rights and/or rights to enforce land/water use restrictions shall be granted to one or more of the following persons, as determined by EPA: (i) the United States, on behalf of EPA, and its representatives, (ii) the State and its representatives, and/or (iii) other appropriate grantees. If EPA so requests, within 45 days of the effective date of this Settlement Agreement, Respondent shall submit to EPA for review and approval with respect to such property:

- (1) A draft easement, in substantially the form [attached hereto as Appendix C,] that is enforceable under the laws of the State of Utah, and
- (2) a current title insurance commitment, or some other evidence of title acceptable to EPA, which shows title to the land described in the easement to be free and clear of all prior liens and encumbrances (except when those liens or encumbrances are approved by EPA or when, despite best efforts, Respondent is unable to obtain release or subordination of such prior liens or encumbrances).

Within 15 days of EPA's approval and acceptance of the easement and the title evidence, Respondent shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment to affect the title adversely, the easement shall be recorded with the Recorder's Office of Summit County. Within 30 days of the recording of the easement, Respondent shall provide EPA with a final title insurance policy, or other final evidence of title acceptable to EPA, and a certified copy of the original recorded easement showing the clerk's recording stamps. If easement is to be conveyed to the United States, the easement and title evidence (including final title evidence) shall be prepared in accordance with the U.S. Department of Justice Title Standards 2001, and approval of the sufficiency of title must be obtained as required by 40 U.S.C. § 255.

55. For purposes of Paragraph 54 of this Settlement Agreement, "best efforts" includes the payment of reasonable sums of money in consideration of access easements, land/water use restrictions, restrictive easements, and/or an agreement to release or subordinate a prior lien or encumbrance. If (a) any access or land/water use restriction agreements required by Paragraphs 54.a or 54.b of this Settlement Agreement are not obtained within 45 days of the effective date of this Settlement Agreement, (b) or any access easements or restrictive easements required by Paragraph 54.c of this Settlement Agreement are not submitted to EPA in draft form within 45 days of EPA's request or (c) Respondent is unable to obtain an agreement pursuant to Paragraph 54.c.(1) from the holder of a prior lien or encumbrance to release or subordinate such lien or encumbrance to the easement being created pursuant to this Settlement Agreement within 45 days of the effective date of this Settlement Agreement, Respondent shall promptly notify the United States in writing, and shall include in that notification a summary of the steps that Respondent has taken to attempt to comply with Paragraph 54 of this Settlement Agreement. The United States may, as it deems appropriate, assist Respondent in obtaining access or land/water use restrictions, either in the form of contractual agreements or in the form of easements running with the land, or in obtaining the release or subordination of a prior lien or encumbrance. Respondent shall reimburse the United

States in accordance with the procedures in Section XVIII (Payment of Response Costs), for all costs incurred, direct or indirect, by the United States in obtaining such access, land/water use restrictions, and/or the release/subordination of prior liens or encumbrances including, but not limited to, the cost of attorney time and the amount of monetary consideration paid or just compensation.

- 56. If EPA determines that land/water use restrictions in the form of State or local laws, regulations, ordinances or other governmental controls are needed to implement the remedy selected in the ROD, ensure the integrity and protectiveness thereof, or ensure non-interference therewith, Respondent shall cooperate with EPA's and the State's efforts to secure such governmental controls.
- 57. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. COMPLIANCE WITH OTHER LAWS

58. Respondent shall comply with all applicable local, state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-site and requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIV. RETENTION OF RECORDS

- 59. During the pendency of this Settlement Agreement and for a minimum of 10 years after commencement of construction of any remedial action, Respondent shall preserve and retain all non-identical copies of documents, records, and other information (including documents, records, or other information in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 10 years after commencement of construction of any remedial action, Respondent shall also instruct its contractors and agents to preserve all documents, records, and other information of whatever kind, nature or description relating to performance of the Work.
- 60. At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such documents, records or other information, and, upon request by EPA, Respondent shall deliver any such documents, records, or other information to EPA. Respondent may assert that certain documents, records, and other information are privileged under the attorney-client privilege or any

other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA with the following: 1) the title of the document, record, or other information; 2) the date of the document, record, or other information; 3) the name and title of the author of the document, record, or other information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or other information; and 6) the privilege asserted by Respondent. However, no documents, records or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

61. Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XV. DISPUTE RESOLUTION

- 62. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.
- 63. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, they shall notify EPA in writing of its objection(s) within 15 days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have 30 days from EPA's receipt of Respondent's written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be granted verbally but must be confirmed in writing.
- 64. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Assistant Regional Administrator ("ARA") level or higher will issue a written decision. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs, and regardless of whether Respondent agrees with the decision.

XVI. STIPULATED PENALTIES

65. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 66 and 67 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondent shall include completion of the Work under this Settlement Agreement or any activities contemplated under any RI/FS Work Plan or other plan approved under this Settlement Agreement identified below, in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

66. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per day for any noncompliance identified in Subparagraph 66(b):

Penalty Per Violation Per Day	Period of Noncompliance
\$ 500	1 st through 14 th day
\$ 1,500	15 th through 30 th day
\$ 37,500	31st day and beyond

- b. Deliverables and Compliance Milestones
 - (1) An original and any revised sampling and analysis plan.
 - (2) An original and any revised remedial investigation report.
 - (3) An original and any revised treatability testing Work plan, if

required.

- (4) An original and any revised treatability study sampling and analysis plan, if required.
 - (5) An original and any revised feasibility study report.
 - (6) Technical memorandum on modeling of site characteristics, if

required.

- (7) Summary of RI data.
- (8) Identification of candidate technologies memorandum.
- (9) Treatability Testing Statement of Work, if required.
- (10) Treatability Study Evaluation Report, if required.
- (11) Memorandum on Remedial Action Objectives.
- (12) Memoranda on development, screening, and detailed comparative analysis of alternatives.
 - (13) Payments of Past and/or Future Response Costs.

- (14) Establishing an escrow account in the event of a dispute.
- 67. For monthly progress reports, or other written documents, stipulated penalties shall accrue in the amount of \$150 per violation, for the first week of noncompliance; \$250 per day, per violation, for the 8th through 14th day of noncompliance; \$1,000 per day, per violation, for the 15th day through the 30th day; and \$5,000 per day, per violation, for all violations lasting beyond 30 days.
- 68. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 87 of Section XX (Reservation of Rights by EPA), Respondent shall be liable for a stipulated penalty in the amount of \$750,000.
- 69. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section X (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (2) with respect to a decision by the EPA Management Official designated in Paragraph 64 of Section XV (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.
- 70. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the same and describe the noncompliance. EPA may send Respondent a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.
- 71. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution). All payments to EPA under this Section shall indicate that the payment is for stipulated penalties, shall reference the EPA Region, the Site/Spill ID Number 08-94, the EPA Docket Number ______, the name and address of the party(ies) making payment, shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," and shall be mailed to:

Regular mail:

Mellon Bank
EPA Region VIII
Attn: Superfund Accounting
Post Office Box 360859
Pittsburgh, Pennsylvania 15251-6859

Express Mail:

Mellon Bank 3 Mellon Bank Center ROOM#153-2713 Pittsburgh, Pennsylvania 15259

or other such address as EPA may designate in writing, or by wire transfer to:

ABA=021030004 TREAS NYC/CTR/ BNF=/AC-68011008

Wire transfers must be sent to the Federal Reserve Bank in New York.

Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s) shall be sent to:

Kathyrn Hernandez Remedial Project Manager Superfund Remedial Section, 8EPR-RA US EPA, Region VIII, 1595 Wynkoop Street Denver, Colorado 80202

and to:

Maureen O'Reilly Superfund Enforcement U.S. EPA Region 8 8ENF-RC 1595 Wynkoop Street Denver, CO 80202

72. At the time of payment, Respondent shall send notice that payment has been made by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

- 73. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.
- 74. Penalties shall continue to accrue as provided in Paragraph 69 during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision.
- 75. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 71.
- 76. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by EPA), Paragraph 87. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XVII. FORCE MAJEURE

- 77. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, *force majeure* is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent' best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.
- 78. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within 48 hours of when Respondent first

knew that the event might cause a delay. Within five days thereafter, Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a *force majeure* event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

79. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Settlement Agreement that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

XVIII. PAYMENT OF RESPONSE COSTS

80. Payment of Past Response Costs.

- a. Within 30 days after the Effective Date, Respondent shall pay to EPA \$386,446.11 for Past Response Costs. Payment shall be made to EPA by Electronic Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondent by EPA Region 8, and shall be accompanied by a statement identifying the name and address of the party(ies) making payment, the Site name, the EPA Region and Site/Spill ID Number 08-94, and the EPA docket number for this action.
- b. At the time of payment, Respondent shall send notice that payment has been made to:

Kathyrn Hernandez Remedial Project Manager Superfund Remedial Section, 8EPR-RA US EPA, Region VIII, 1595 Wynkoop Street Denver, Colorado 80202

and to:

Maureen O'Reilly Superfund Enforcement U.S. EPA Region 8 8ENF-RC 1595 Wynkoop Street Denver, CO 80202

and by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

c. The total amount to be paid by Respondent pursuant to Subparagraph 80.a shall be deposited in the Richardson Flat Operable Unit #2 Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

81. Payments of Future Response Costs.

- a. Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill requiring payment that includes a Region 8 Cost Summary. Respondent shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 82 of this Settlement Agreement. Payment shall be made to EPA by Electronic Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondent by EPA Region 8, and shall be accompanied by a statement identifying the name and address of the party(ies) making payment, the Site name, the EPA Region and Site/Spill ID Number 08-94, and the EPA docket number for this action.
- b. At the time of payment, Respondent shall send notice that payment has been made to:

Kathyrn Hernandez Remedial Project Manager Superfund Remedial Section, 8EPR-RA US EPA, Region VIII, 1595 Wynkoop Street Denver, Colorado 80202

and to:

Maureen O'Reilly Superfund Enforcement U.S. EPA Region 8 8ENF-RC 1595 Wynkoop Street Denver, CO 80202

and by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

- c. The total amount to be paid by Respondent pursuant to Subparagraph 81.a. shall be deposited in the Richardson Flat Operable Unit #2 Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.
- 82. If Respondent does not pay Past Response Costs within 30 days of the Effective Date, or does not pay Future Response Costs within 30 days of Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance of Past Response Costs and Future Response Costs, respectively. The Interest on unpaid Past Response Costs shall begin to accrue on the Effective Date and shall continue to accrue until the date of payment. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section XVI. Respondent shall make all payments required by this Paragraph in the manner described in Paragraph 81.
- 83. Respondent may contest payment of any Future Response Costs under Paragraph 81 if it determines that EPA has made an accounting error or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the EPA Project Coordinator. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondent shall within the 30 day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 81. Simultaneously, Respondent shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Utah and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the EPA Project Coordinator a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with

establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 81. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 81. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent' obligation to reimburse EPA for its Future Response Costs.

XIX. COVENANT NOT TO SUE BY EPA

84. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work, Past Response Costs, and Future Response Costs. This covenant not to sue shall take effect upon receipt by EPA of the Past Response Costs due under Section XVIII of this Settlement Agreement and any Interest or Stipulated Penalties due for failure to pay Past Response Costs as required by Sections XVIII and XVI of this Settlement Agreement. This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XVIII. This covenant not to sue extends only to Respondent and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY EPA

- 85. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or Settlement Agreement all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.
- 86. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

- a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definition[s] of Past Response Costs or Future Response Costs;
 - c. liability for performance of response action other than the Work;
 - d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.
- 87. Work Takeover. In the event EPA determines that Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Respondent may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by EPA in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondent shall pay pursuant to Section XVIII (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANT NOT TO SUE BY RESPONDENT

- 88. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Past Response Costs, Future Response Costs, or this Settlement Agreement, including, but not limited to:
- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claim arising out of the Work or arising out of the response actions for which the Past Response Costs or Future Response Costs have or will be incurred,

including any claim under the United States Constitution, the Utah Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

- c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Past Response Costs or Future Response Costs.
- 89. Respondent agrees not to seek judicial review of the final rule listing the Site on the NPL based on a claim that changed site conditions that resulted from the performance of the Work in any way affected the basis for listing the Site.
- 90. Except as expressly provided in this Section XXI, Paragraph 88 (Non-Exempt De Micromis Waiver), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an Settlement Agreement pursuant to the reservations set forth in Paragraphs 83 (b), (c), and (e) (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.
- 91. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).
 - 92. Non-Exempt De Micromis Waiver.

Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that it may have for all matters relating to the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

- 93. The Non-Exempt De Micromis Waiver in Paragraph 92 above shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against Respondent. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:
- a. that such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of the Solid Waste Disposal Act (also known as the Resource Conservation and Recovery Act or "RCRA"), 42 U.S.C.

§ 6972, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. that the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site.

XXII. OTHER CLAIMS

- 94. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent.
- 95. Except as expressly provided in Section XXI, Paragraph 92 (The Non-Exempt De Micromis Waiver), and Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.
- 96. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).
- 97. Respondent shall, with respect to any suit or claim brought by them for matters related to this Settlement Agreement, notify the United States in writing no later than 60 days prior to the initiation of such suit or claim.
- 98. Respondent shall, with respect to any suit or claim brought against them for matters related to this Settlement Agreement, notify in writing the United States within ten days of service of the complaint on Respondent. In addition, Respondent shall notify the United States within ten days of service or receipt of any Motion for Summary Judgment and within ten days of receipt of any order from a court setting a case for trial.

XXIII. CONTRIBUTION

99. a. The Parties agree that this settlement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4)" of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 122(h)(4), and that each Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise

provided by law, for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work, Past Response Costs, and Future Response Costs.

- b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States for the Work, Past Response Costs, and Future Response Costs.
- c. Except as provided in Section XXI (Covenant not to Sue by Respondent), Paragraph 92 (The Non-Exempt De Micromis Waiver), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Paragraph 92 each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

XXIV. INDEMNIFICATION

- 100. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.
- 101. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.
- 102. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States,

arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondent and any person for performance of Work on or relating to the Site.

XXV. INSURANCE

103. At least 30 days prior to commencing any on-Site Work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of 1 million dollars, combined single limit, naming the EPA as an additional insured. Within the same period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

- 104. Within 30 days of the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in the amount of \$500,000.00 in one or more of the following forms, in Settlement Agreement to secure the full and final completion of Work by Respondent:
- a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA equaling the total estimated cost of the Work;
- c. a trust fund administered by a trustee acceptable in all respects to EPA; and/or
- d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work.

- 105. Any and all financial assurance instruments provided pursuant to this Section shall be in a form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondent shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 104, above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.
- 106. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 104 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.
- 107. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVII. INTEGRATION/APPENDICES

108. This Settlement Agreement and its appendices and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

[&]quot;Appendix A" is the SOW.

"Appendix B" is a map of the Lower Silver Creek Site, Operable Unit 2 of the Richardson Flats Tailings Superfund Site.

["Appendix C" is a draft easement.]

XXVIII. ADMINISTRATIVE RECORD

109. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondent shall submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Upon request of EPA, Respondent shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports. Upon request of EPA, Respondent shall additionally submit any previous studies conducted under state, local or other federal authorities relating to selection of the response action, and all communications between Respondent and state, local or other federal authorities concerning selection of the response action. At EPA's discretion, Respondent shall establish a community information repository at or near the Site, to house one copy of the administrative record.

XXIX. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

- 110. This Settlement Agreement shall be effective the day upon which this Settlement Agreement has been signed by both EPA officials.
- 111. This Settlement Agreement may be amended by mutual agreement of EPA and Respondent. Amendments shall be in writing and shall be effective when signed by EPA. EPA Project Coordinators do not have the authority to sign amendments to the Settlement Agreement.
- 112. No informal advice, guidance, suggestion, or comment by the EPA Project Coordinator or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXX. NOTICE OF COMPLETION OF WORK

113. When EPA determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to payment of Future Response Costs or record retention, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the RI/FS Work Plan if appropriate in Settlement

Agreement to correct such deficiencies, in accordance with Paragraph 36 (Modification
of the Work Plan). Failure by Respondent to implement the approved modified RI/FS
Work Plan shall be a violation of this Settlement Agreement.

Agreed this day of	, 2009.
For Respondent	
By:	
Title:	

It is so ORDERED AND AGREED this	day of	, 2009.
BY:	•	
Matthew Cohn, Assistant Director Legal Enforcement Program U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street Denver, CO 80202-1129	DATE:	
BY:		
Kelcey Land, Director RCRA & CERCLA Technical Enforcement Progr U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street Denver, CO 80202-1129		
BY:		
David Ostrander, Director Preparedness, Assessment, and Emergency Responser. U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street Denver, CO 80202-1129	•	
EFFECTIVE DATE:		

STATEMENT OF WORK FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY RICHARDSON FLAT TAILINGS SITE LOWER SILVER CREEK, OPERABLE UNIT 2

1. INTRODUCTION

The purpose of this remedial investigation/feasibility study (RI/FS) for Lower Silver Creek (the Site), is to investigate the nature and extent of contamination at the Site and develop and evaluate potential remedial alternatives. The RI and FS are interactive and may be conducted concurrently so that the data collected in the RI influences the development of the remedial alternatives in the FS, which in turn affects the data needs and the scope of any treatability studies.

United Park City Mines (UPCM) will conduct this RI/FS and will produce a draft RI and FS report that are in accordance with this Statement of Work, the <u>Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA</u> (U.S. EPA, Office of Emergency and Remedial Response, October 1988) and any other guidances that EPA uses in conducting a RI/FS (a list of the primary guidances is attached), as well as any additional requirements in the Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study (Settlement Agreement). The RI/FS Guidance describes the report format and the required report content. Respondent will furnish all necessary personnel, materials and services needed, or incidental to, performing the RI/FS, except as otherwise specified in the Settlement Agreement.

At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD). The remedial action alternative selected by EPA will meet the cleanup standards specified in CERCLA Section 121. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report, as adopted by EPA, and the Human Health and Ecological Risk Assessment will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

As specified in CERCLA Section 104(a)(1), as amended by SARA, EPA will provide oversight of the Respondent's activities throughout the RI/FS. Respondent will support EPA's initiation and conduct of activities related to the implementation of oversight activities.

2. PURPOSE OF THE STATEMENT OF WORK

This Statement of Work (SOW) sets forth requirements for conducting an RI/FS at the Site. Respondent will develop all Sampling and Analysis Plans (SAPs), perform all sample collection and analysis in accordance with established EPA protocol, perform all data validation, and produce a draft RI and FS report for the Site. Respondent will provide copies of all documents to EPA for review, as provided in the Settlement Agreement. EPA shall provide written comments on these draft documents to Respondent within 30 days of document receipt. Respondent will take these comments into consideration when finalizing the document. Any comments that Respondent does not accept will be discussed with EPA prior to release of the next version of the document.

As specified in CERCLA Section 104(a)(1), EPA will provide oversight of Respondent's activities throughout the RI/FS. Respondent shall support EPA's initiation and conduct of oversight activities. EPA's determinations, approvals, and activities as provided for in the Settlement Agreement and in this SOW shall be conducted in consultation with the State as provided for by CERCLA, the National Contingency Plan, and applicable guidance.

Performance of the Work described in this SOW by Respondent and EPA's review and approval of documents and activities described in this SOW shall be performed in accordance with the procedures described in the Settlement Agreement. Respondent shall furnish all necessary personnel, materials, and services needed or incidental to performing the Work described in this SOW, except as otherwise specified in the Settlement Agreement.

3. TASK 1 – SCOPING

The Site objectives for the Lower Silver Creek Site located in the State of Utah have been determined preliminarily, based on the available information, to be the following:

Protection of human health and the environment through a strategy of excavation or isolation of tailings to prevent tailings from becoming wind-borne, or contributing to contaminant leaching into Silver Creek.

3.1 Site Background

Before planning RI/FS activities, all existing Site data will be thoroughly compiled and reviewed by Respondent. Respondent will refer to Table 2-1, of the RI/FS Guidance for a comprehensive list of data collection information sources. This information will be utilized in determining additional data needed to characterize the Site, better define potential applicable or relevant and appropriate requirements (ARARs), and develop a range of preliminary identified remedial alternatives. Data Quality Objectives (DQOs) will be established, subject to EPA approval, which will specify the usefulness of existing data. Decisions on the

necessary data and DQOs will be made by EPA. Respondent shall assemble existing information relevant to the RI/FS for the Site including but not limited to:

- All documentation and reporting of historical operations activities and studies concerning the contaminants associated therewith,
- All environmental sampling and analysis plans,
- All environmental and other data, maps and photos, and
- All reports describing data summaries, data evaluations, or interpretations of data.

This shall include available data relating to the types and quantities of hazardous substances, pollutants, or contaminants within the Site and past material management and disposal practices.

Respondent shall provide this information to EPA and the State in accordance with the schedule contained in Section 11 of this SOW. This data will be assembled in the RI for the Site.

3.2 Conduct Field Visit

Respondent shall conduct a field visit of the Site during the project scoping phase to assist in developing a sampling approach to fully characterize the nature and extent of contamination within the Site. Respondent shall invite EPA and the State to participate in the field visit and shall provide at least two weeks notice of the proposed date.

3.3 Project Scoping Summary – Plan Development

Based on review of the existing information and the field visit, the specific project scope will be planned. Project planning activities include those tasks described below as well as identifying data needs, developing a Workplan, designing a sampling plan and identifying health and safety protocols to collect information required to complete an RI/FS for the Site. The RI/FS Workplan and sampling and analysis plan must be reviewed and approved by EPA prior to initiation of field activities. Respondent will meet with EPA regarding the following activities and before the drafting of the scoping deliverables:

Refine and document preliminary remedial action objectives and alternatives

Once existing Site data has been analyzed and an understanding of the potential Site risks has been determined by EPA, Respondent will review and, if necessary, refine the remedial action objectives that have been identified by EPA for the contaminated medium. The revised remedial action objectives will be documented in a technical memorandum and subject to EPA approval. Respondent will then identify a preliminary range of broadly defined potential

remedial action alternatives and associated technologies. The range of potential alternatives should encompass where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

• Document the need for treatability studies

If remedial actions involving treatment have been identified by Respondent or EPA, treatability studies will be required except where the Respondent can demonstrate to EPA's satisfaction that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) will be planned to occur concurrently with Site characterization activities.

• Begin preliminary identification of potential ARARs

Respondent will conduct a preliminary identification of potential state and federal ARARs (chemical-specific, location specific and action specific) to assist in the refinement of remedial action objectives, and the initial identification of remedial alternatives and ARARs associated with a particular action. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

3.4 Scoping Deliverables

Respondent will develop a Workplan documenting the decision and evaluations completed during the scoping process. It should be developed in conjunction with the SAP and the HSF. The Workplan will include a comprehensive description of the Work to be performed, including methodologies to be utilized as well as a corresponding schedule.

3.4.1 RI/FS Workplan

A Workplan documenting the decisions and evaluations completed during the scoping process will be submitted to EPA for review and approval. The Workplan should be developed in conjunction with the sampling and analysis plan and the Site health and safety plan, although each plan may be delivered under separate cover. The Workplan will include a comprehensive description of the Work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. The Workplan will present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. The plan will also include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology,

geology, demographics, ecological, cultural and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; a summary of existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan will include a description of the Site management strategy developed by EPA during scoping, a preliminary identification of remedial alternatives, and data needs for evaluation of remedial alternatives. The plan will reflect coordination with treatability study requirements. It will include a process for and manner of indentifying Federal and state ARARs (chemical specific, location-specific, and action specific).

The major part of the Workplan is a detailed description of the tasks to be performed, information needed for each task and the Human Health and Ecological Risk Assessment, information needed for each task, and a description of the Work products that will be submitted to EPA. This includes the deliverables set forth in the remainder of this Statement of Work; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a data management plan (e.g., requirements, data format and backup data management), monthly reports to EPA and meetings and presentations to EPA at the conclusion of each major phase of the RI/FS. Respondent will refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Workplan.

3.4.2 Sampling and Analysis Plan

Respondent will prepare a sampling and analysis plan (SAP) to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP consists of a field sampling plan (FSP) and a quality assurance project plan (QAPP).

The FSP will define in detail the sampling and data gathering methods that will be used on the project. It will include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP will describe the projects objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs at a minimum shall reflect use of analytic methods to identify contamination and remediation of contamination consistent with the levels for remedial action objectives identified in the proposed National Contingency Plan, pages 51425-26 and 51433 (December 21, 1988). In addition, the QAPP will address sampling procedures, sample custody, analytical procedures and data reduction, validation, reporting and

personnel qualifications. Respondent will demonstrate, in advance to EPA's satisfaction, that each laboratory it may use is qualified to conduct the proposed Work. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA review and approval. EPA may require that Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the Work, including information on personnel qualifications, equipment and material specifications. Respondent will provide assurances that EPA has access to laboratory personnel, equipment and records for sample collection, transportation and analysis.

Because of the unknowns regarding this Site and due to the iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. Respondent will submit a technical memorandum documenting the need for additional data, and identifying DQOs whenever such requirements are identified. Respondent is responsible for fulfilling additional data and analysis needs identified by EPA consistent with the general scope and objectives of this RI/FS.

3.4.3 Site Health and Safety Plan

A health and safety plan will be prepared in conformance with Respondent's health and safety program, and in compliance with OSHA regulations and protocols. The health and safety plan will include the 11 elements described in the RI/FS Guidance. It should be noted that EPA does not "approve" the Respondent's health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for protection of human health and the environment.

4. COMMUNITY RELATIONS

EPA will develop and implement community relations activities for the Site. Respondent shall, as requested by EPA, assist EPA by providing information regarding the Site and/or the Site history, participating in public meetings, developing graphics, placing newspaper ads developed by EPA, or distributing fact sheets developed by EPA. In addition, Respondent may establish a community information repository, at or near the Site, to house one copy of the administrative record. All Respondent conducted community relations activities will be subject to oversight by EPA.

5. SITE CHARACTERIZATION

The overall objective of Site characterization is to describe the nature and extent of contamination within the Site and to describe areas of the Site that may pose a threat to human health or the environment. As part of the RI, Respondent will perform the activities described in this task, including the preparation of a Site characterization summary and a RI report. The overall objective of Site characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology. Surface and subsurface pathways of migration will be defined. Respondent will identify the sources of contamination and define the nature, extent, and volume of sources of contaminations, including their physical and chemical constituents as well as their concentrations at incremental locations to background in the affected media. Respondent will also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projects extent. Respondent shall perform the activities described in this section including:

- Implementation of the Workplan, sampling and analysis plan, and health and safety plan;
- Document field activities;
- Arrange for the laboratory analysis of samples at laboratories specified by EPA and in accordance with the EPA-approved SAPs;
- Deliver laboratory data to EPA in the format specified in the SAPs for inclusion in project database maintained by EPA;
- Prepare summary reports for each phase of investigation; and
- Prepare a draft and final RI report.

Respondent shall notify EPA at least two weeks in advance of field Work starting and shall provide a monthly progress report and participate in meetings at EPA's request. Respondent shall notify EPA in writing upon completion of field activities for the RI. Respondent shall submit all sampling results in a computerized format in order to allow EPA to rapidly evaluate the collected data.

In order to develop a list of potential remedial alternatives, Respondent must know the chemicals of concern and the media of concern that are to be treated (or contained where appropriate). As soon as EPA has evaluated the Site characterization data submitted by Respondent, Respondent shall develop and EPA will approve and release two or more memoranda to all interested parties. One shall list the chemicals of concern for human health and ecological effects and their toxicity values; the other shall list the potential exposure scenarios, exposure assumptions, and exposure point concentrations that EPA plans to use in the Human Health and Ecological Risk Assessment. The purpose of releasing this information is three-fold: 1) to keep the public informed about progress at the Site, 2) to allow public input at this stage, and 3) to give the PRP sufficient information to continue developing remedial alternatives that are appropriate for the Site.

5.1 Field Investigation

The field investigation includes the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities will be performed by Respondent in accordance with the Workplan and SAP. At a minimum, this shall include the following:

5.1.1 Implement and Document Field Support Activities

Respondent shall consistently document and adequately record in well maintained field logs and laboratory reports, information gathered during Site characterization. The method(s) of documentation shall be consistent with that specified in the SAP. Respondent shall use field logs to document observations, measurements, and significant events that occur during field activities. Respondent shall ensure that laboratory reports document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

Respondent shall maintain field reports and sample shipment records. Analytical results developed under the SAPs shall not be included in any Site characterization summary reports or RI reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, Respondent shall establish a data security system to safeguard field logs, field data sheets, laboratory reports, chain of custody forms and other project records to prevent loss, damage, or alteration of project documentation.

5.1.2 Investigate and Define Site Physical and Biological Characteristics

Respondent will collect data on the physical and biological characteristics of the Site and its surrounding area. This information will be ascertained through a combination of physical measurements, observations, and sampling efforts and will be utilized to define potential transport pathways and human and ecological receptor populations. In defining the Site's physical characteristics, Respondent will also obtain sufficient engineering data (such as pumping characteristics) for the projection of contaminant fate and transport, and development and screening of remedial action alternatives, including information to assess treatment alternatives.

5.1.3 Define Sources of Contamination

Respondent will locate the sources of contamination. For each location, the areal extent and depth of contamination will be determined by

sampling at incremental depths on a sampling grid. The physical characteristics and chemical constituents and their concentrations will be determined for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources to the level established in the QA/QC plan and DQOs.

Defining the source of contamination will include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

Respondent shall obtain access to properties for sampling and shall implement the SAP in accordance with the schedule described in the SAP. Respondent shall arrange for analytical data from laboratories to be reported directly to EPA in the format specified by EPA in the SAP.

5.1.4 Describe the Nature and Extent of Contamination

Respondent will gather information to describe the nature and extent of contamination as a final step during the field investigation. Respondent will use analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through various media at the Site. In addition, the Respondent will gather data for calculations of contaminant fate and transport. Respondent will use this information to help to determine aspects of the appropriate remedial action alternatives to be evaluated.

5.2 Data Analyses

5.2.1 Evaluate Site Characteristics

Respondent will analyze and evaluate the data to describe:

- 1) Site physical and potentially biological characteristics
- 2) contaminant source characteristics
- 3) nature and extent of contamination
- 4) contaminant fate and transport

Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation will include the actual and potential magnitude of releases from the sources and horizontal and vertical spread of contamination, as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data

and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The Respondent shall agree to discuss results and collect any data gaps identified by the EPA. Also this evaluation shall provide any information relevant to Site characteristics necessary for evaluation of the need for remedial action in the Human Health and Ecological Risk Assessment and for the development and evaluation of remedial alternatives. Analyses of the data collected for Site characterization will meet the DQOs developed in the QA/QC plant stated in the SAP (or revised during the RI).

5.3 Data Management Procedures

Respondent will consistently document the quality and validity of field and laboratory data compiled during the RI.

5.3.1 Document Field Activities

Information gathered during Site characterization will be consistently documented and adequately recorded in well maintained field logs and laboratory reports. The method(s) of documentation must be specified in the Workplan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

5.3.2 Maintain Sample Management and Tracking

Respondent will maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Workplan will not be included in any Site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, Respondent will establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

5.4 Site Characterization Deliverables

Respondent will prepare the preliminary Site characterization summary and the remedial investigation report.

5.4.1 Preliminary Site Characterization Summary

After completing field sampling and analysis, Respondent will prepare a concise Site characterization summary. This summary will review the investigative activities that have taken place, and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site including the affected medium, location, types, physical state, concentration of contaminants and quantity. In addition, the location, dimensions, physical condition and varying concentrations of each contaminant throughout each source and the extent of contaminant migration through each of the affected media will be documented. The Site characterization summary will provide EPA with a preliminary reference for evaluating the development and screening of remedial alternatives and refinement and identification of ARARs.

5.4.2 RI Report

Respondent will prepare and submit a draft RI report to EPA for review and approval. The RI report shall summarize results of field activities to characterize the Site, the sources of contamination, the nature and extent of contamination and the fate and transport of contaminants. Respondent shall refer to Table 3-13 in "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA", OSWER Directive 9355.3-01, October 1988 for a suggested RI report format. Following comment by EPA, Respondent will prepare a final RI report which satisfactorily addresses EPA's comments.

6. TREATABILITY STUDIES

Treatability testing will be performed by Respondent and/or USEPA/ERT to assist in the detailed analysis of alternatives. In addition, if applicable, testing results and operating conditions will be used in the detailed design of the selected remedial technology. The following activities will be performed and/or reviewed by Respondent.

6.1 Determination of Candidate Technologies and of the Need for Testing

Respondent will identify in a technical memorandum, subject to EPA review and approval; candidate technologies for a treatability studies program during project planning. The listing of candidate technologies will cover the range of technologies required for alternatives analysis. The specific data requirements for the testing program will be determined and refined during Site characterization and the development and screening of remedial alternatives.

6.1.1 Literature Review

Respondent will conduct a literature survey to gather information on performance, relative costs, applicability, removal efficiencies, operation and maintenance requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated, or cannot be adequately evaluated for the Site on the basis of available information, treatability testing will be conducted. Where it is determined by EPA that treatability testing is required, and unless Respondent can demonstrate to EPA's satisfaction that they are not needed, Respondent will submit a Statement of Work to EPA outlining the steps and data necessary to evaluate and initiate the treatability testing program.

6.1.2 Evaluate Treatability Studies

Once a decision has been made to perform treatability studies, Respondent and EPA will decide on the type of treatability testing to use. Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondent will either submit a separate treatability testing Workplan or an amendment to the original Site Workplan for EPA review and approval.

6.2 Treatability Testing and Deliverables

If Respondent is conducting the treatability testing, the deliverables required in addition to the memorandum identifying candidate technologies (where treatability studies are conducted) include: a Workplan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

6.2.1 Treatability Testing Workplan

Respondent will prepare a treatability testing Workplan or amendment to the original Site Workplan for EPA review and approval describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing should be documented as well.

6.2.2 Treatability Study SAP and Health and Safety Plan

If the original QAPP, HSP or FSP is not adequate for defining the activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP will be prepared by Respondent for EPA review and approval.

6.2.3 Treatability Study Evaluation Report

Following completion of any treatability testing, Respondent will analyze and interpret the testing results in a technical report to EPA, which may be part of the RI/FS or a separate deliverable. The report will evaluate the technology's effectiveness, implementability, cost and actual results as compared with predicted results. The report will also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

7. DEVELOPMENT AND SCREENING OF REMEDIAL ALTERNATIVES

The development and screening of remedial alternatives is performed to develop an appropriate range of waste management options that will be evaluated. This range of alternatives should include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but varying in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; options involving containment with little or no treatment; options involving both treatment and containment; and a no-action alternative. At a minimum these options must ensure protection of human health and the environment, Respondent shall perform the following activities, to complete the development and screening of remedial alternatives, concurrent with the RI Site characterization task.

7.1 Refine and Document Remedial Action Objectives

Based on Respondent's Human Health and Ecological Risk Assessment, Respondent will review and if necessary modify the Site-specific remedial action objectives, specifically the PRGs (Preliminary Remediation Goals), that were established by EPA prior to or during negotiations between EPA and the Respondent. The revised PRGs will be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs will specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

7.2 Develop General Response Actions

Respondent will develop general response actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination, to satisfy the remedial action objectives.

7.3 Identify Areas or Volumes of Media

Respondent will identify areas or volumes of media to which general response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. The chemical and physical characterization of the Site will also be taken into account.

7.4 Identify, Screen, and Document Remedial Technologies

Respondent shall identify and evaluate remedial technology types and process options applicable to each general response action. The term "technology types" refers to general categories of technologies. The term "process options" refers to specific processes within each technology type. Several broad technology types may be identified for each general response action and numerous technology process options may exist within each technology type.

Respondent shall use information from the RI on contaminant types and concentrations and the Site characteristics to screen out technologies and process options that cannot be effectively implemented at the Site. Respondent shall document the results of the initial screening of technology types and process options. Respondent shall refer to Figures 4-4 and 4-5 in the "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA", OSWER Directive 9355.3-01, October 1988 for examples of figures that may be used to summarize the initial screening of technologies and process options and the evaluation of process options. Process options will be evaluated on the basis of effectiveness, implementability, and cost factors to select and retain one or, if necessary, more representative processes for each technology type. The technology types and process options will be summarized for inclusion in a technical memorandum. The reasons for eliminating alternatives must be specified.

7.5 Assemble and Document Alternatives

Respondent shall assemble selected representative technologies into alternatives that represent a range of treatment and containment combinations that will address the remedial action objectives for the Site. A summary of the assembled alternatives and their related action-specific ARARs will be prepared by Respondent for inclusion in a technical memorandum. The reasons for eliminating alternatives during the preliminary screening process must be specified.

7.6 Alternative Screening and Selection of Alternatives for Detailed Analysis

Respondent shall perform a screening of each remedial alternative based on effectiveness, implementability, and cost. As appropriate, the screening will preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives will include options that use treatment technologies and permanent solutions to the maximum extent practicable. PRGs for each chemical in each medium will also be modified as necessary to incorporate any new Risk Assessment information presented in the Human Health and Ecological Risk Assessment report. Additionally, action specific ARARs will be updated as the remedial alternatives are refined.

7.7 Development and Screening of Alternatives Technical Memorandum

Respondent shall prepare a technical memorandum summarizing the Work performed in the development and screening of alternatives and the results of each subtask described in this section including:

- A description of the general response actions and the areas or volumes of contaminated media to which they apply,
- A description of the remedial technology types and process options applicable to each general response action,
- The results of the initial screening of remedial technology types and process options,
- A description of the remedial alternatives,
- The results of the screening of alternatives based on effectiveness, implementability, and cost,
- A description of the alternatives that remain after screening and the actionspecific State and federal ARARs for each alternative.

Respondent shall submit the technical memorandum to EPA and the State for review and EPA approval in accordance with Section X of the Settlement Agreement and in accordance with the schedule contained in Section 11 of this SOW. This deliverable will document the methods, rationale, and results of the alternatives screening process.

8. DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES

Upon EPA approval of the Development and Screening of Alternatives Technical Memorandum, the Respondent shall perform a detailed analysis of the remaining remedial alternatives. The detailed analysis shall be sufficient to allow EPA to adequately compare the alternatives, select a remedial action for the Site, and demonstrate satisfaction of the CERCLA statutory remedy selection requirements (§121(b)(1)(A) of the CERCLA).

Respondent shall assess each alternative against the following seven of the nine evaluation criteria contained in the National Contingency Plan (40 CFR Part 300.430(e) (9) (iii)):

- 1. Overall protection of human health and the environment
- 2. Compliance with ARARs
- 3. Long term effectiveness and permanence
- 4. Reduction of toxicity, mobility, or volume through treatment
- 5. Short-term effectiveness
- 6. Implementability
- 7. Cost
- 8. State Acceptance
- 9. Community Acceptance

(Note: criteria 8 and 9 are considered after the RI/FS report has been released to the general public)

Respondent shall conduct the detailed analysis of alternatives by evaluating each alternative against the nine evaluation criteria above and then performing a comparative analysis between remedial alternatives. That is, each alternative shall be compared against the others using the evaluation criteria as a basis of comparison. For each alternative Respondent should provide: 1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative, and 2) a discussion of the individual criterion assessment. If the Respondent does not have direct input on criteria 8) state (or support agency) acceptance and 9) community acceptance, these will be addressed by EPA.

Identification and selection of the preferred alternative are reserved by EPA. The Respondent will prepare a technical memorandum summarizing the results of the comparative analysis.

9. FEASIBILITY STUDY REPORT

Respondent shall prepare a draft FS report that summarizes the development and screening of remedial alternatives and the detailed analysis of alternatives. Identification and selection of the preferred alternative are reserved by EPA in consultation with the State. Respondent shall refer to the "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (OSWER Directive 9355.3-01, October 1988) for an outline of the FS report and the required report content. Respondent shall submit the draft FS report to EPA and the State for review and EPA approval in accordance with Section X of the AOC and the schedule contained in Section 11 of this SOW. Respondent will prepare a final FS Report which satisfactorily addresses EPA's comments.

10. ALTERNATIVES ANALYSIS FOR INSTITUTIONAL CONTROLS AND SCREENING

Respondent shall submit a memorandum on the Institutional Controls identified in the Memorandum on Development and Screening of Alternatives as potential remedial actions. The Alternatives Analysis for Institutional Controls and Screening shall (1) state the objectives (i.e., what will be accomplished) for the Institutional Controls; (2) determine the specific types of Institutional Controls that can be used to meet the remedial action objectives; (3) investigate when the Institutional Controls need to be implemented and/or secured and how long they must be in place; (4) research, discuss and document any agreement with the proper entities (e.g., state, local government entities, local landowners, conservation organizations, Respondents) on exactly who will be responsible for securing, maintaining and enforcing the Institutional Controls. See "Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups," (EPA 540-F-00-005), OSWER Directive 9355.0-74FS-P, September 2000. The Alternatives Analysis for Institutional Controls and Screening shall also evaluate the Institutional Controls identified in the Memorandum on Development and Screening of Alternatives against the nine evaluation criteria outlined in the NCP (40 C.F.R. 300.430(e)(9)(iii)) for CERCLA cleanups, including but not limited to costs to implement, monitor and/or enforce the Institutional Controls. See "Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups," (EPA 540-F-00-005), OSWER Directive 9355.0-74FS-P, September 2000 for discussion of what factors to consider with respect to evaluation of Institutional Controls under the nine criteria. In addition, it is not necessary to evaluate "reduction of toxicity, mobility or volume through treatment" in the context of Institutional Controls. The Alternatives Analysis for Institutional Controls and Screening shall be submitted as an appendix to the Draft Feasibility Study Report.

11. SCHEDULE OF DELIVERABLES

Respondent shall deliver documents and perform activities described in this SOW in accordance with the following schedule:

SOW REFERENCE	DOCUMENT OR ACTIVITY	DELIVERY DATE
Section 3.1	Provide existing information	Within 30 days after the
	· .	Effective Date of the
		Settlement Agreement and,
		thereafter, 2 weeks after
	·	becoming aware of new
`		information
Section 3.2	Notification of field visit	2 weeks prior to field visit
Section 3.2	Conduct field visit	Within 45 days after the
·		Effective Date of the
		Settlement Agreement
Section 3.4	Draft RI/FS Workplan, SAP, HSP	Within 30 days prior to

		planned date, as set in writing by EPA, for start of field Work
Section 3.4	Final RI/FS Workplan, SAP, HSP	Within 45 days after receiving EPA and State comments on the Draft Workplan, SAP, HSP
Section 4	Community relations support	As requested by EPA
Section 5	Draft Human Health and Ecological Risk Assessment	As requested by EPA
Section 5	Final Human Health and Ecological Risk Assessment	Within 45 days after receiving EPA and State comments on draft Risk Assessments
Section 5.4.2	Draft RI Report	Within 30 days after EPA's approval of the Risk Assessments
Section 5.4.2	Final RI Report submission	Within 45 days after receiving EPA and State comments on draft RI Report
Section 6	Treatability Studies	See Settlement Agreement, Section IX, 34(g)(1-6)
Section 7	Memorandum on Remedial Action Objectives	See Section IX, 34(h)(1). Within 30 days after submission of the final Treatability study required or, if not required, within 60 days or the Final RI Report submission
Section 7	Draft Development and Screening of Alternatives Technical Memorandum	See Section IX, 34(h)(2). Within 30 days of submission of the Memorandum on Remedial Action Objectives
Section 7	Final Development and Screening of Alternatives Technical Memorandum	Within 45 days after receiving EPA and State comments on Draft Development and Screening of Alternatives Technical
Section 7	Panart on Comparative Analysis	Memorandum
Section /	Report on Comparative Analysis and Presentation to EPA	See Section IX, 34(i)(1). Report on Comparative Analysis submitted within 60 days after receiving final

		remedial action objectives from EPA. Presentation to EPA within 45 days of submitting the Report on Comparative Analysis.
Section 9 and 10	Draft FS Report [includes Alternatives Analysis for Institutional Controls and Screening, See Section IX, 34(i)(2)]	Within 30 days after the presentation, described in Section IX, 34(i)(1), to EPA
Section 10	Final FS Report submission	Within 30 days after receiving EPA and State comments on draft FS report

ATTACHMENT A List of Guidance Documents

Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA. OSWER Directive 9355.3-01

A Guide to Developing and Documenting Cost Estimates during the Feasibility Study. EPA 540-R-D0-002, OSWER No. 9355.0-75

CERCLA Compliance with Other Laws Manual. Part I. Interim Final EPA 540/G - 89/006, OSWER No. 9234.1-01

CERCLA Compliance with Other Laws Manual: CERCLA Compliance with the CWA and SDWA. OSWER No. 9234.2-06/FS